COLLEGE OF ARTS & SCIENCES
2020-21 COMPUTER SCIENCE - SOFTWARE DEVELOPMENT DEGREE PLAN

FIRST YEAR - FRESHMAN

Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
Fall Semester				Spring Semester			
CIS	171	Computer Programming I	3	CIS	172	Computer Programming II[3]	3
ENG	101	English Composition I[1]	3	ENG	102	English Composition II[1]	3
MAT	120	Precalculus[3]	4	MAT	122	Analytics & Calculus I[3]	4
CIS	211	Intro to Web Design	3	COM	140	Speech Communication[1]	3
BIB	121	Life of Christ[1]	2	BIB	122	Acts of the Apostles[1]	2
			15				15

SECOND YEAR - SOPHOMORE

Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
Fall Semester				Spring Semester			
CIS	273	Data Structures[3]	3	CIS	374	Algorithms[3]	3
CIS	267	Application Development I[3]	3	CIS	367	Application Development II[3]	3
MAT	223	Analytics & Calculus II[3]	4	MAT	240	Discrete Mathematics[3]	3
PHS	211	Physics for Science & Engineering	4	PHS	212	Physics for Science & Engineering II	4
BIB		Bible	2	BIB		Bible	3
			16				16

THIRD YEAR - JUNIOR

Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
Fall Semester				Spring Semester			
CIS	386	Arch & Assembly Language[3]	3	CIS	460	Operating Systems[3]	3
CIS	474	Artificial Intelligence[3]	3			Creative Works[1]	3
MAT	235	Introductory Statistics	3			Behavioral Science[1]	3
HIS		History[1]	3			Elective	3
CIS	324	Database Systems[3]	3			Elective	3
BIB		Bible	2	BIB		Bible	2
			17				17

FOURTH YEAR - SENIOR

Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
Fall Semester				Spring Semester			
		Elective	3	CIS	345	Computer Networks[3]	3
CIS	368	Software Engineering[3]	3			Elective	3
CIS	470	Programming Languages	3	CIS	491	Advanced Topics in CS[3]	3
CIS	444	Parallel Programming[3]	3			Elective	3
BIB	346	Foundations of Faith[1]	3	BIB	495	Values in Human Thought & Action[1]	3
			15				15

[1]Liberal Arts Core Requirement

[2]Liberal Arts Core Requirement in *Undergraduate Catalog*

[3]Course has prerequisite. See corresponding *Undergraduate Catalog*

ADDITIONAL ITEMS RELATED TO THE MAJOR

The Quantitative Reasoning liberal arts core requirement must be satisfied by MAT 122, Calculus I.
The Natural Sciences liberal arts core requirement must be satisfied by PHY 211, Physics for Science and Engineering I.

Due to a deep presrequisite structure, it's is essential that CIS 171, Computer Programming I, be taken the first fall semester of study in order to graduate in 8 semesters.

The following guidelines are important. Failure to follow these guidelines may delay graduation.

1. Plan schedules carefully. Plan to fulfill prerequisites for future courses.
2. Do not alter the sequence of courses without consulting with your academic adviser as not all classes are offered every semester.
3. Before the enrollment period, check to make sure holds will not prevent you from registration.
4. Register for classes early during the registration period to secure classes.

The Four-Year Degree Plan is a suggested plan of study. This plan does not replace the *Undergraduate Catalog.* The *Undergraduate Catalog* provides the official listing of program requirements.

2020-21 Undergraduate Liberal Arts Core Requirements

I. Biblical Values
BIB 121 **AND** 122 **AND** 346 **OR** 446 — 7

II. Basic Skills

A. Written Communication
ENG 101 **AND** ENG 102 — 6

B. Oral Communication
COM 140 Speech Communication — 3

C. Quantitative Reasoning
MAT 100 **OR** MAT 101 **OR** — 3 or 4
MAT 120 **OR** MAT 122 **OR** MAT 235

III. Broadened Perspectives

A. Behavioral Sciences
BIB/FAM 230 **OR** PSY 210 **OR** — 3
SOC 241 **OR** SWK 251

Complete course names and descriptions for the liberal arts core requirements are located in the *Undergraduate Catalog* .

B. Natural Sciences
BIO 100 **OR** BIO 105 **OR** BIO 110 **OR** — 3 or 4
BIO 111 **OR** BIO 112 **OR** BIO 211 **OR**
CHE 121 w/CHE121L **OR** PHS 111 **OR**
PHS 112 **OR** PHS 201 **OR** PHS 211

C. Arts and Humanities

1. History — 3
HIS 111 **OR** HIS 112 **OR** HIS 221 **OR**
HIS 222 **OR** HUM399A **OR** POL 251

2. Creative Works — 3
ART 110 **OR** ART 201 **OR** ART 234 **OR**
ENG 225 **OR** ENG 226 **OR** ENG 235 **OR**
ENG 236 **OR** ENG 245 **OR** ENG 246 **OR**
ENG 299A/399A **OR** MUS 110 **OR** MUS 214 **OR**
PHI 243 **OR** PHI 245 **OR** PHI 246 **OR**
THE 160 **OR** THE 265 **OR** THE 299A/399A

3. Humanities Capstone — 3
BIB/HUM 495